

**GILA RIVER BASIN**

**09432000 GILA RIVER BELOW BLUE CREEK, NEAR VIRDEN, NM**

**LOCATION**--Lat 32°38'53", long 108°50'43", in SE1/4SW1/4 sec. 18, T.19 S., R.19 W., Grant County, Hydrologic Unit 15040002, on left bank at head of canyon, 1.4 mi downstream from Blue Creek, 10 mi east of Virden, and 16 mi upstream from New Mexico-Arizona State line.

**DRAINAGE AREA**--3,203 mi<sup>2</sup>, excluding Animas River basin.

**PERIOD OF RECORD**--May to Nov. 1914, Mar. to Sept. 1915, July 1927 to current year. July 1927 to May 1931 monthly discharge only, published in WSP 1313, computed as sum of flow at Virden Bridge, 9 mi downstream, and in Sunset Canal. Published as "Gila River near Duncan, Ariz.," 1914-15 and as "Gila River at Fuller's Ranch, near Duncan, Ariz.," 1931-38.

**REVISED RECORDS**--WSP 1283: Drainage area. WSP 1313: 1929, 1931-32(M).

**GAGE**--Water-stage recorder. Elevation of gage is 3,875 ft above sea level, from river-profile map. May 11, 1914, to Sept. 30, 1915, at site 6 mi downstream, 1,000 ft upstream from intake of Sunset Canal. June 1 to July 7, 1931, nonrecording gage at present site and datum. Since Apr. 18, 1980, supplementary gage on left bank 800 ft downstream at same datum. Since June 1980, crest-stage gages at supplementary gage site. Since Nov. 1990, water-stage recorder at supplementary gage.

**REMARKS**--Records fair except for estimated daily discharges, which are poor. Station is above all Duncan Valley diversions. Diversions for irrigation of about 6,200 acres above station.

**EXTREMES FOR PERIOD OF RECORD**--Maximum discharge, 58,700 ft<sup>3</sup>/s Dec. 19, 1978, gage height, 29.00 ft, from rating curve extended above 38,000 ft<sup>3</sup>/s on basis of slope-area measurement of peak flow; minimum, 1 ft<sup>3</sup>/s July 14, 1934.

**EXTREMES FOR CURRENT YEAR**--Peak discharges greater than base discharge of 1,900 ft<sup>3</sup>/s and (or) maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Aug. 16 .....	2015	10,400	10.30
Aug. 31 .....	1730	2,350	7.00
Sept. 25 .....	2145	*14,950	*12.78

Minimum daily discharge, 8.2 ft<sup>3</sup>/s July 8.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e15	39	99	69	102	84	215	183	58	11	51	38
2	e17	38	97	72	102	84	203	170	52	11	54	36
3	e22	35	95	72	102	82	208	166	48	9.8	92	35
4	23	33	91	71	102	86	277	160	42	9.3	170	74
5	22	31	90	74	104	117	499	149	37	9.0	65	48
6	22	32	90	76	106	147	1030	141	33	8.8	56	45
7	22	33	91	80	106	183	1070	137	30	8.3	51	44
8	24	34	91	84	104	316	1150	131	29	8.2	51	43
9	27	34	92	81	101	482	1410	125	27	8.4	66	41
10	27	33	92	80	98	732	1410	123	26	8.7	63	38
11	29	37	90	88	94	898	1310	122	24	8.8	70	37
12	33	44	88	85	91	968	1450	111	23	9.1	69	34
13	33	51	88	86	92	1030	1570	108	22	9.2	59	30
14	34	152	88	88	98	1010	1500	106	22	9.4	86	24
15	35	249	87	96	98	911	1290	95	22	9.9	129	22
16	35	252	83	97	97	817	984	89	21	23	801	20
17	34	195	80	98	90	e765	747	86	20	29	192	19
18	31	167	79	98	85	e649	606	82	19	22	174	18
19	30	149	78	100	84	e532	519	82	18	18	245	21
20	29	136	76	100	74	488	437	82	17	16	127	24
21	28	130	74	100	71	458	380	78	16	14	114	25
22	e28	126	72	100	81	437	344	75	15	14	104	31
23	e35	120	72	100	85	411	308	72	14	89	90	32
24	40	116	72	97	90	393	275	70	13	41	78	31
25	39	113	75	96	91	382	251	65	12	80	71	1910
26	38	110	78	106	86	377	236	63	11	76	59	224
27	41	106	79	110	82	364	221	68	11	94	50	69
28	42	103	70	110	82	352	214	65	10	72	43	68
29	41	102	68	110	82	324	204	61	10	60	32	112
30	40	100	65	105	---	278	194	58	10	59	25	84
31	39	---	62	103	---	237	---	59	---	55	175	---
TOTAL	955	2900	2552	2832	2680	14394	20512	3182	712	900.9	3512	3277
MEAN	30.8	96.7	82.3	91.4	92.4	464	684	103	23.7	29.1	113	109
MAX	42	252	99	110	106	1030	1570	183	58	94	801	1910
MIN	15	31	62	69	71	82	194	58	10	8.2	25	18
AC-FT	1890	5750	5060	5620	5320	28550	40690	6310	1410	1790	6970	6500
CFSM	0.01	0.03	0.03	0.03	0.03	0.14	0.21	0.03	0.01	0.01	0.04	0.03
IN.	0.01	0.03	0.03	0.03	0.03	0.17	0.24	0.04	0.01	0.01	0.04	0.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2004, BY WATER YEAR (WY)

	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
MEAN	159	137	242	299	344	419	272	147	49.3	73.4	198	199																																																													
MAX	1667	1040	2485	4158	1752	1464	1138	977	298	366	1164	1507																																																													
(WY)	1973	1995	1979	1993	1993	1973	1973	1992	1992	1986	1988	1975																																																													
MIN	5.39	34.9	47.6	64.0	61.1	45.1	27.7	13.5	4.43	4.85	9.35	4.89																																																													
(WY)	1957	1957	1957	1981	1971	1971	1955	1956	1956	1951	1951	1953																																																													

SUMMARY STATISTICS

	FOR 2003 CALENDAR YEAR	FOR 2004 WATER YEAR	WATER YEARS 1932 - 2004
ANNUAL TOTAL	26383.5	58408.9	
ANNUAL MEAN	72.3	160	206
HIGHEST ANNUAL MEAN			746
LOWEST ANNUAL MEAN			43.1
HIGHEST DAILY MEAN	294	Mar 28	1910
LOWEST DAILY MEAN	3.8	Jul 24	8.2
ANNUAL SEVEN-DAY MINIMUM	4.7	Jul 18	8.6
ANNUAL RUNOFF (AC-FT)	52330	115900	149400
ANNUAL RUNOFF (CFSM)	0.023	0.050	0.064
ANNUAL RUNOFF (INCHES)	0.31	0.68	0.88
10 PERCENT EXCEEDS	150	378	438
50 PERCENT EXCEEDS	68	80	92
90 PERCENT EXCEEDS	10	20	22